

STORMS AND WEATHER WARNINGS

WASHINGTON FORECAST DISTRICT

On the morning of the 3d, northwest storm warnings were ordered from Atlantic City to Boston and warning was given in radio bulletins that winds would be strong, reaching gale force at times, off the Middle and North Atlantic coast. Strong winds occurred along the coast and severe gales off the coast between Bermuda and Nantucket.

Storm warnings were ordered on the evening of the 5th from Atlantic City to Eastport in anticipation of the disturbance over Hudson Bay increasing in intensity, but winds did not reach dangerous proportions and warnings were accordingly taken down the following morning.

Warnings were hoisted on the evening of the 7th from Atlantic City to Eastport in connection with a disturbance over Ohio, and strong winds and gales occurred over the region indicated.

On the morning of the 12th, warnings of strong shifting winds were disseminated from Jacksonville to Sandy Hook and at 4 p. m. warnings of strong winds and gales were extended northward to Eastport. Warnings were ordered down south of Hatteras the night of the 12th, and warnings were continued north of Delaware Breakwater to Eastport on the 13th and 14th. Winds occurred substantially as indicated in the advices.

Warnings were ordered on the morning of the 15th from Wilmington to Boston in connection with a disturbance over the Lower Lakes and on the evening of that day were extended northward to Eastport. On the following day warnings were changed to northwest from Delaware Breakwater to Eastport, and on the 17th were continued from New London, Conn., to Eastport. Strong winds and gales occurred as forecast.

On the 21st storm warnings were hoisted from Hatteras to Eastport, but winds were only fresh to strong and did not reach gale velocities.

In connection with a disturbance over western Pennsylvania, warnings for strong, shifting winds were ordered on the 27th from Sandy Hook to Eastport and strong winds occurred substantially as indicated.

At 3 p. m. on the 30th, storm warnings were issued from Punta Gorda to Jacksonville, Fla., in connection with a disturbance of tropical origin central slightly west or northwest of the Tortugas. The disturbance moved northeastward with increased intensity across the Florida Peninsula, passing near and south of Tampa. It was attended by heavy rains, especially in the right front quadrant, a fall of 14.08 inches occurring at Miami, Fla. A discussion of the subsequent movement and warnings issued in connection with this disturbance will be found in the next issue of the MONTHLY WEATHER REVIEW.

On the 23d, norther warnings were sent to the chief hydrographer, Canal Zone, and fresh to strong north and northwest winds were indicated for the Caribbean. In his letter the chief hydrographer indicates that the wind occurred as stated in the advices.

In this connection the pilot-balloon run of November 24 at Kingston, Jamaica, is so interesting that it is given here: Surface—N—10 m p s; 250m—N—16 m p s; 500m—N—6 m p s; 750m—ESE—1 m p s; 1,000m—E—4 m p s; 1,500m—SE—2 m p s. It will be noted that the northerly current extended up to 500 meters.

Frost and freezing temperature warnings were issued for portions of the east Gulf and south Atlantic States, on the 8th, 9th, 15th, 17th, 20th, 21st, 22d, 23d, and 28th.—*R. H. Weightman.*

CHICAGO FORECAST DISTRICT

The weather in the Chicago forecast district during the month of November was rather variable, especially in the eastern portion. The mean temperature was below the average from the Mississippi Valley eastward and in most of Wyoming, and above in the balance of the district.

The total precipitation was below the normal, except in small scattered areas. The largest excesses were in the Ohio Valley and thence westward across the southern portions of Missouri and Kansas, due to the fact that the most important storms passed east-northeastward across the southern portion of the forecast district.

The principal storms affecting a considerable portion of the district were as follows:

1. Disturbance developing in the far West on the 1st–2d, the center reaching the Great Lakes by the morning of the 5th, attended almost generally by strong winds on the Lakes.

2. Disturbance which developed in the far Southwest, passing northeastward across the southern and eastern portions of the Chicago district on the 7th and 8th, attended by dangerous gales on the lower Lakes and rather strong winds on southern Lake Michigan.

3. A disturbance of apparently minor importance in the West, upon reaching the eastern portion of the district on the 12th–13th, increased decidedly in intensity. Storm winds were confined to the lower Lakes and southern Lake Huron.

4. A storm which moved from the western plateau east-northeastward over the southern portion of the forecast district and finally to the St. Lawrence Valley. The attendant gales in this case also were confined to the lower Lakes and southern Lake Huron.

5. A disturbance which appeared in Manitoba on the 20th, the center passing southeastward across Lake Superior on the 21st. The storm winds which occurred in connection with this disturbance were chiefly noted on Lake Superior and eastern Lake Michigan.

Storm warnings were ordered displayed at Lake stations at all points threatened well in advance of the appearance of these respective storms, and so far as known no casualties occurred except for the wreck of a barge in tow on Lake Superior on November 5. The towline broke, and the boat foundered, with the loss of the entire crew, consisting of six men and one woman.

No general cold-wave warnings were issued, but advices were limited to warnings on the 7th for the eastern portion of the forecast district and the 26th–27th from the Great Plains eastward across the upper Mississippi Valley and northern Lake region, decided falls in temperature following the passage of the barometric disturbances eastward across the district.

Special advices were sent to the Wenatchee Valley Traffic Association, Wenatchee, Wash., and other fruit-shipping interests in that section on each Monday morning during the month, covering the temperature conditions for the ensuing week; and it is believed that every one of these forecasts was fully verified, and that the shippers were enabled to arrange for the transfer of the crops eastward in a satisfactory manner.

From time to time special advices are furnished in connection with the protection of some project. An instance of this character is the special forecast sent to Alpena, Mich., on the morning of November 19, "Weather conditions now favorable for dredging outfit to proceed from Harbor Beach to Alpena. Moderately westerly winds and mostly fair weather indicated."